

ABSTRACT OF THE DISCLOSURE

An object of the present invention is to provide a plasma processing system and a plasma processing method which use inductive coupled plasmas but do not cause disadvantages due to
5 slant electric fields immediately after plasmas have been ignited. Another object of the present invention is to provide a plasma processing system and a plasma processing method which use inductive coupled plasmas and include a Faraday shield to thereby
removes slant magnetic fields so as to ensure the ignition of plasmas.

10 The plasma processing system comprises a chamber 31, a bell jar 32, a coil 42 disposed on the outside of the bell jar 32, a Faraday shield 44 disposed between the bell jar 32 and the coil 42, a susceptor 33, a conducting member 49 disposed upper of the bell jar 32, a first high-frequency electric power source for the
15 coil 42 to generate induced electromagnetic fields, and a second high-frequency electric power source 34 for generating electric fields between the susceptor 33 and the conducting member 49.